

OP-5

Catch composition of demersal trawl fisheries in Mersin Bay, Turkey

İsmet SAYGU<sup>1</sup>, Ahmet Raif ERYAŞAR<sup>2</sup>, Gökhan GÖKÇE<sup>1</sup>, Hüseyin ÖZBİLGİN<sup>3</sup>,  
Sinan MAVRUK<sup>1</sup>, Yeliz DOĞANYILMAZ ÖZBİLGİN<sup>3</sup>, Ebrucan KALECİK<sup>3</sup>, Adem  
Sezai BOZAOĞLU<sup>4</sup>

<sup>1</sup> Çukurova University, Faculty of Fisheries, Adana, Turkey.

<sup>2</sup> Recep Tayyip Erdoğan University, Faculty of Fisheries, Rize, Turkey.

<sup>3</sup> Mersin University, Faculty of Fisheries, Mersin, Turkey.

<sup>4</sup> Yüzüncü Yıl University, Faculty of Fisheries, Van, Turkey.

Presenter's telephone: +90 464 223 33 85 (1421)

Fax: +90 464 223 41 18

E-mail address: [ahmet.eryasar@erdogan.edu.tr](mailto:ahmet.eryasar@erdogan.edu.tr)

This study presents catch composition and biodiversity, investigated during TUBITAK project 109O684, in Mersin Bay, north-eastern Mediterranean which is an important fishing ground for demersal trawls. A total of 177 hauls were performed onboard a commercial trawler on the commercial fishing grounds between 15 September 2009 and 15 April 2013. The monthly change of species composition was evaluated using Principal Component Analysis (PCA) to Catch Per Unit Effort (CPUE) values. Shannon-Wiener index ( $H'$ ) and its evenness ( $J'$ ) component, Pielou evenness index, were calculated to clarify temporal changes of the diversity. One hundred and thirty-five species belonging to 10 orders, 26 classes, and 71 families were identified. For all hauls, the results showed that CPUE indices by number (N) and weight (W, kg) were 1572.63 and 23.83, respectively. While the most abundant species was *Mullus barbatus* in terms of %IRI and CPUE (W/h), *Equulites klunzingeri* had the highest CPUE (N/h). Four clear groups of months were appeared on the PCA space. The highest diversity was observed in November with the  $H' = 3.1415$  and  $J' = 0.7071$  index values. The results highlighted differences of catch composition and biodiversity between fishing months.

**Keywords:** Bottom Trawl Fisheries, Species Composition, Catch Biodiversity, Catch Per Unit Effort, North-Eastern Mediterranean